

## ABSTRACT

The present invention provides [[a]] methods and compositions for altering a B cell mediated malignancy pathology in a patient. These methods comprise ~~This methods comprises~~ administering a composition comprising at least one [[and/]] or two chimeric proteins. Each chimeric protein comprises at least a portion of either the V<sub>H</sub> or V<sub>L</sub> region of the Id protein of the B cells associated with the a immunoglobulin molecule from particular B cells from a patient having a B cell mediated malignancy pathology, and an immunoglobulin constant region. The genes encoding V<sub>H</sub> or V<sub>L</sub> regions ~~and the genes encoding immunoglobulin constant regions~~ are isolated and inserted into an expression vector encoding immunoglobulin constant regions. The chimeric proteins are expressed in ~~produced by introducing the expression vectors into~~ insect cell lines. The purified chimeric proteins are ~~purified using antibody affinity columns, and then~~ chemically conjugated to an immunogenic carrier protein ~~keyhole limpet hemocyanin (KLH)~~. ~~Since the~~ The conjugates comprising the ~~comprise~~ chimeric Id protein(s) ~~are proteins made specifically from particular B cells from a patient having B cell mediated pathology, when it is~~ administered to such a patient, with or without a cytokine ~~such as granulocyte macrophage CSF,~~ or [[a]] chemokine, the chimeric protein ~~it can induce~~ immune responses to alter the ~~such a~~ B cell mediated malignancy pathology.